

IN THE CLAIMS

(Although no claim amendments are presented herein, for the Examiner's convenience a complete listing of the claims is given below.)

1. (Previously Presented) A printing apparatus for performing printing on a printing medium by reciprocally scanning a carriage to which a printhead having a plurality of printing elements is mounted, said printing being performed during acceleration, deceleration, and constant-speed movement of the carriage, said apparatus comprising:

a buffer storing print data to be used in a printing operation for one scan;

counting means for counting at least a part of the print data, stored in said buffer, which causes the printhead to perform a printing operation during acceleration of the carriage;

comparison means for comparing a counted value, counted by said counting means, with a predetermined threshold value;

control means for controlling to change a number of printing elements of the printhead to be used in a printing operation for one scan of the carriage, based on a comparison result of said comparison means;

a DC motor for driving the carriage; and

a power source for supplying electric power to the printing apparatus,

wherein the number of printing elements of the printhead to be used in a printing operation for one scan of the carriage, which is controlled by said control means, satisfies a condition such that a sum of a driving current required for driving the number of printing elements and a driving current supplied to the DC motor for accelerating the carriage is equal to or lower than a capacity of the power source.

2. (Original) The apparatus according to claim 1, wherein said counting means divides said buffer into a plurality of areas, and among the divided plurality of areas, performs counting on an area storing print data to be used by the printhead during acceleration of the carriage.

3. (Canceled)

4. (Canceled)

5. (Previously Presented) The apparatus according to claim 1, further comprising determining means for determining whether or not the power source is an AC power source or a battery power source,

and wherein, in a case where it is determined by said determining means that the power source is a battery power source, controlling is performed by said control means.

6. (Original) The apparatus according to claim 1, wherein said control means controls to perform multi-pass printing.

7. (Original) The apparatus according to claim 1, wherein the printhead is an inkjet printhead which performs printing by discharging ink.

8. (Original) The apparatus according to claim 7, wherein said inkjet printhead comprises an electrothermal transducer for generating heat energy to be applied to ink, so as to discharge ink utilizing the heat energy.

9. (Previously Presented) The apparatus according to claim 1, further comprising:

acquisition means for acquiring data regarding power consumption of the DC motor during acceleration or deceleration of the carriage; and

addition means for adding the data regarding power consumption of the DC motor acquired by said acquisition means to data regarding power consumption of the printhead which is obtained from a counted value counted by said counting means, wherein

said comparison means compares a value, obtained by said addition means, with a second predetermined threshold value.

10. (Previously Presented) The apparatus according to claim 9, wherein said comparison means changes the second predetermined threshold value in accordance with a moving direction of the carriage.

11. (Previously Presented) A printing control method for use by a printing apparatus to perform printing on a printing medium by reciprocally scanning a carriage driven by a DC motor to which a printhead having a plurality of printing elements is mounted, said printing being performed during acceleration, deceleration, and constant-speed movement of the carriage, said method comprising:

a storing step of storing into a buffer print data to be used in a printing operation for one scan;

a counting step of counting at least a part of the print data, stored in the buffer in said storing step, which causes the printhead to perform a printing operation during acceleration of the carriage;

a comparison step of comparing a counted value, counted in said counting step, with a predetermined threshold value; and

a control step of controlling to change a number of printing elements of the printhead to be used in a printing operation for one scan of the carriage, based on a comparison result of said comparison step,

wherein the number of printing elements of the printhead to be used in a printing operation for one scan of the carriage, controlled in said control step, satisfies a condition such that a sum of a driving current required for driving the number of printing elements and a driving current supplied to the DC motor for accelerating the carriage is equal to or lower than a capacity of a power source for supplying electric power to the printing apparatus.

12. (Canceled)